

## ABSTRACT:

The invention relates to a method of analyzing an object data set which comprises points in a multi-dimensional space and in which a tubular structure occurs, said method comprising the following steps:

- a) choosing a starting position in or near the tubular structure;
- 5 b) deriving a cutting plane through the tubular structure at the starting position,
- c) determining a number of points forming part of the surface of the tubular structure in the vicinity of the starting position, and
- d) calculating a gradient to the surface for each of said points.

The method also comprises the characterizing steps of:

- 10 e) determining for each point a vector from the center of the tubular structure to said point;
- f) determining the angle between said vector and the gradient at said point;
- g) adding said point to a selection of points if said angle is equal to or smaller than a predetermined ceiling value;
- h) using said selection of points to calculate an orientation for the cutting plane such that
- 15 the direction thereof is as parallel as possible to the longitudinal axis of the tubular structure at the starting position, and
- i) repeating the steps a) through h) for a new starting position along the tubular structure if necessary.

20 The invention also relates to a computer program for carrying out the method according to the invention.

Fig. 1